

## LEGISLATIVE ASSEMBLY FOR THE AUSTRALIAN CAPITAL TERRITORY

# STANDING COMMITTEE ON PLANNING AND ENVIRONMENT

(Reference: Proposed nomination of the ACT as a UNESCO biosphere reserve)

#### **Members:**

MR M GENTLEMAN (The Chair) MR Z SESELJA (The Deputy Chair) MS M PORTER

TRANSCRIPT OF EVIDENCE

**CANBERRA** 

**TUESDAY, 10 APRIL 2007** 

Secretary to the committee: Dr H Jaireth (Ph: 6205 0137)

By authority of the Legislative Assembly for the Australian Capital Territory

Submissions, answers to questions on notice and other documents relevant to this inquiry that have been authorised for publication by the committee may be obtained from the committee office of the Legislative Assembly (Ph: 6205 0127).

### **WITNESSES**

<b>HENCHMAN, MR ALISTAIR</b> , Director Southern, Parks and Wildlife,	
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#### The committee met at 1.59 pm.

**HENCHMAN, MR ALISTAIR**, Director Southern, Parks and Wildlife, New South Wales Department of Environment and Conservation

**PULSFORD, MR IAN**, Manager, Strategies for Conservation on Private Land, New South Wales Department of Environment and Conservation

**WORBOYS, MR GRAEME**, Vice Chair (Mountains Biome), IUCN World Commission on Protected Areas

THE CHAIR: The public hearing this afternoon of the Standing Committee on Planning and Environment is on its inquiry into the proposed nomination of the ACT as a UNESCO biosphere reserve. With us this afternoon we have Mr Alistair Henchman, director of the southern parks and wildlife division of the Department of Environment and Conservation in New South Wales; Mr Ian Pulsford, manager of the strategies for conservation on private land program from the same department; and Mr Graeme Worboys, Vice Chair (Mountains Biome), IUCN World Commission on Protected Areas.

Before we start to hear your presentations, I would like to read the card for you. The committee has authorised the recording, broadcasting and rebroadcasting of these proceedings in accordance with the rules contained in the resolution agreed by the Assembly on 7 March 2002 concerning the broadcasting of Assembly and committee proceedings. Before the committee commences taking evidence, let me place on record that all witnesses are protected by parliamentary privilege with respect to submissions made to the committee in evidence given before it. Parliamentary privilege means special rights and immunities attach to parliament, its members and others necessary to the discharge of functions of the Assembly without obstruction and without fear of prosecution.

While the committee prefers to hear all evidence in public, if the committee accedes to such a request, the committee will take evidence in camera and record that evidence. Should the committee take evidence in this manner, I remind the committee and those present that it is within the power of the committee at a later date to publish or present all or part of that evidence to the Assembly. I should add that any decision regarding publication of in camera evidence or confidential submissions will not be taken by the committee without prior reference to the person whose evidence the committee may consider publishing.

Welcome this afternoon, gentlemen. I propose that we hear first from Mr Henchman, then from Mr Pulsford, and then a statement from Mr Worboys. Perhaps we will go to questions after that. Mr Henchman, would you like to make an opening statement?

**Mr Henchman**: Yes, I would. Thank you very much, and thanks for inviting us here today. You would be aware, of course, that Kosciuszko national park is a biosphere reserve, declared in 1977, and was one of the first in Australia. The three basic functions of a biosphere reserve are realised in Kosciuszko through our normal management planning, but, in particular for conservation, obviously the park protects the natural and cultural resources of the area.

For development, the park plays a major role in contributing to the economy of the

south-east, particularly through the presence of the Snowy hydro and the ski resorts that generate a huge amount of economic activity, particularly for south-east New South Wales, as well as the normal park visitation that happens in a large national park. We have a strong program of controlling these development activities through our leasehold system, and also through development control and environmental management. We are currently in the process of rolling out comprehensive and detailed environmental management systems for those developments.

In terms of logistical support, Kosciuszko has a long and well-respected history of scientific research, and just the length of time that that science has been going on in the park is of significant value in an international sense, the longevity of the sites. It also has a strong educational focus. We have school-based curricula programs running in the park every day, and we have got strong interpretive and awareness raising programs both in the park generally and in the ski resorts through programs such as the "keep winter cool" program, a climate change awareness program. Also, the ongoing research is very much linked with international research programs, and in particular monitoring climate change in mountainous areas around the world. Our management of Kosciuszko national park actually implements those key programs of a biosphere reserve.

You would also be aware that, following the UNESCO review of biosphere reserves in 2003, the review committee recommended to Australia that we look at expanding the Kosciuszko biosphere reserve to keep it in currency with the new regime for biosphere reserves and the expanded objectives for biosphere reserves. So, since that time, we have been having some preliminary discussions with our neighbours, and that includes the local government areas around the park. There are five local government areas. We see the ACT's interest in creating a biosphere reserve as consistent with our desire to expand the Kosciuszko biosphere reserve beyond the boundaries of the national park itself. So we are very interested in talking with the ACT, should you be interested, in expanding the reserve and working together to create a larger biosphere reserve. That is all I wanted to say; thank you very much.

**THE CHAIR**: Thank you very much. Mr Pulsford, do you have a presentation for the committee?

**Mr Pulsford**: Yes. I also have some copies of the presentation and some background papers which I would like to make available to you. I am going to explain how the ACT and the biosphere concept can fit into a much bigger landscape conservation proposal that was announced recently by the New South Wales government. It is called the Australian Alps to Atherton connectivity conservation initiative. I am going to run through that fairly quickly with a bunch of slides and then focus at the end on maybe some mechanisms and things that might contribute towards a biosphere reserve in the ACT.

Just initially, this concept is about connecting landscapes and ecosystems from down in Melbourne all the way up the east coast to an area near Cairns, on the Atherton Tableland. The black line on this map is the great divide, so the catchment boundary. All the drainage from this line drains inland, from this side to the coast. The other line, the red line, is the great escarpment. The conservation corridor concept is the yellow highlight that includes all of the lands both here through Victoria and across here from

the ACT, through northern New South Wales, right up the east coast to Queensland.

What is A to A? This summarises the whole thing really quickly and puts it in a nutshell for you. It is a land use concept that aims to achieve landscape conservation connectivity for 2,800 kilometres along the great eastern ranges. The great eastern ranges we define as the great escarpment and the great divide, although it doesn't always stay on the great divide, from the Australian Alps to the Atherton and beyond. Because it is a concept that is flexible, it can be built upon. It can become a spine on which you can build a whole lot of ribs to attach other conservation agendas or initiatives.

This is to be achieved through support of a vision, and this is terribly important because this is an aspect of what the ACT might want to contribute from this, and through a set of agreed principles, through leadership by government and by the community. Both those partners need to get behind this initiative for it to get somewhere. The goal of this is to improve the resilience of ecosystems and species to adapt to the threats from the loss of habitat that has gone on for the last 200 years, climate change, which is on everyone's lips, and the resultant changed fire regimes and the expansion of pests and weeds. We aim to achieve this through better coordination and management of tools, knowledge, science, and planning and funding, to increase awareness and support. That knowledge, science and tools are some things that the ACT and the biosphere reserve concept may well contribute to this concept. It is a keystone point in the corridor.

Most importantly, it is about conservation across all land tenures. It is not restricted to protected areas. This is an interim vision. It is just a draft, and it is one that we will evolve over time in consultation with the wider community. It is about land-holders and land managers in the community and scientists working together to conserve habitats for that great stretch of native vegetation that extends along the eastern seaboard of the continent.

The key message from this concept is community involvement through voluntary partnerships, through consultation, and by using a mix of targeted mechanisms and incentives. The key way of using these tools is through getting much improved communication and understanding, awareness and support for the idea, applying the best available science and focusing the increased investment that is now going to be available in New South Wales at least on starting to achieve improving habitat connectivity. The state and federal governments, through the environment protection and heritage ministerial council, have already agreed to cooperate in developing the concept further. We are already at the announcement phase. It is the beginning of a whole process of consultation and involvement.

Most importantly, targeted investment and integrated investment are what this project is about. It is about complementing and integrating all the work that is done by catchment management authorities and other agencies and community groups. This just shows you quickly an image of part of the great escarpment near Minnamurra, Jamberoo, and it shows dense native vegetation along the escarpment, but you can see that there is fragmentation occurring right up to the escarpment edge. So there is great potential, with ongoing land clearing or development activities, for fragmentation to eat into this conservation corridor. The same sorts of processes could happen in the

ACT or anywhere along the corridor.

Here is another quick shot of the great escarpment. Sorry, it is not very bright. It is very bright here, but it is not so bright up there. That is a satellite image of the great escarpment at Bellingen. The lighter areas are the cleared areas developed for agriculture and then there is the escarpment edge and the densely forested areas of the New England national park and the Dorrigo national park. It shows you the extent of connectivity; a very well connected, very diverse, very rich landscape.

So why bother? Why should we be trying to do this? There has been a massive impact on biodiversity, as we know, historically in Australia. There has been a massive reduction in the abundance and distribution of many species. In fact, it has led to mass extinction of many species and ecosystems in Australia. Australia has one of the worst extinction records in the world: 10 per cent lost globally of Australian species. Also, there has been a decline in the provision of ecosystem services, including water, and this corridor concept helps to retain those values and helps to minimise the impacts of further declines.

What are the causes of this decline? Obviously, habitat loss has been a major cause; development; land clearing. The projected growth of the Australian population is by 30 per cent by 2050, so the pressure is not going to diminish. We can see development happening everywhere, all around the ACT and anywhere around Sydney and the south coast. There is going to be an expansion of pest species, and climate change is clearly going to lead to hotter, drier summers, resultant increased fire regimes, fire intensity, and those in turn will have an effect on ecosystems.

What is the global significance of this corridor? It contains three world heritage areas that are internationally recognised, dozens and dozens of national parks and very large wilderness areas. It is the crown jewels of the reserve system in eastern Australia. It has immense value to Aboriginal people for its spiritual and cultural values. I have described it as a continental scale lifeline for biodiversity and cultural heritage. It is a concept of our landscape that just has not been portrayed this way before. It is about putting a plan on the table and getting people to see how it affects them and how they might want to participate and be involved.

It contains rainforests that contain the greatest concentration of primitive flowering plants in the world that date back from the split up of the Gondwana continent. There are all these other arguments but, because of time, I am just going to keep moving a little bit more quickly. I say that it is arguably the terrestrial equivalent of the Great Barrier Reef. It is an interconnected series of biodiversity hotspots connected by native vegetation. They all need to be managed really well. The ACT is at a keystone point in that corridor.

It is the longest, most unfragmented north-south mountainous landscape in Australia—there are no other opportunities to do this anywhere else in Australia—and it gives us the maximum opportunity to conserve things over the maximum elevation and latitude, and climate range. It captures our most reliable rainfall, so it is critical to our survival. The ACT is incredibly aware of that. So catchment management is crucial. Two-thirds of New South Wales's threatened plants and animals are found in the yellow corridor that I highlighted—that is from our own analysis—and that is an

extraordinary figure. It just shows how diverse, but also how limited, is the range of a lot of these species. And it is a source of inspiration for many people.

This map, produced by the Department of Environment and Heritage, just shows you very quickly why we are putting this argument for conservation connectivity. It is the richest part of eastern Australia. You can see this map of species density showing Australian vertebrates, a selected group of vascular plants and vertebrates. It shows the concentration around the east coast. This one just shows the same sort of story for endemic species.

How does this fit into national policies? A to A is consistent with two publications of the Natural Resource Management Ministerial Council standing committee—the national biodiversity and climate change action plan, which you are probably familiar with, and the national action plan to address biodiversity decline. The second document provides a nationally coordinated focus on the three identified threats; that is, climate change, biodiversity loss and invasive species. The first priority action that is identified in that is to establish continental scale ecological linkages to strengthen the national reserve system. The way to achieve this is through a targeted broadscale change in the way biodiversity assets are managed across all land tenures. The biosphere reserve concept for the ACT meets all of the same sorts of goals.

This shows the woody and non-woody vegetation in New South Wales. The cleared areas are basically the light colour. The dark colour shows the forests and woodlands. Native grasslands aren't shown on this map and it is a slight exaggeration of the extent of vegetation clearing. Nevertheless, it gives you an idea of where the fragmentation occurs. You can see there is a link between the ACT, the Kosciuszko national park and the Namadgi national park, across to the coastal ranges of the great escarpment, an area around Sydney, this area of the upper Hunter and the border ranges where fragmentation is probably greatest and where the project that I am talking about is probably going to focus a lot of its energies.

That just shows the protected area system in New South Wales and the state forests, showing the extent of protected areas and how they contribute to connectivity. In southern New South Wales, in the ACT, we have incredible conservation connectivity already, and we just want to build on this concept. There is almost continuous connectivity from the Hunter Valley, 600 kilometres, all the way to the Victorian border. The Australian Alps are connected right through to near Melbourne.

This is just an example that I wanted to draw on of where we got some of the ideas and inspiration from international corridor work through programs that Graeme Worboys is involved in with the IUCN. I am a member of IUCN as well and we have been collaborating to bring advice to the New South Wales government about ways that we can achieve landscape scale conservation. This isn't quite the same as a biosphere reserve but it has some characteristics that are relevant to biosphere reserves.

The Yellowstone to Yukon initiative is a great example of an initiative in the northern United States. I won't go into the details, but it involves up to 800 organisations that have agreed to the vision and principles. There is a website that you can look at on the internet, and they are involved in developing partnerships with communities and

creating awareness about the need to maintain conservation connectivity in that landscape. There is an excellent book that has been published, which Graeme has just lent me, on this. It gives you an example of how well documented some of these initiatives are overseas.

This is an Australian example of large-scale landscape conservation that is now starting to proceed. This is the Gondwana link project in Western Australia and there are heavy duty techniques being used to reconnect places like the Stirling Range, for instance, with the Fitzgerald River national park, both incredibly significant parks in the wheat belt of Western Australia. Here is the team of partners that are involved in it. Greening Australia, the Wilderness Society and some of the agencies over there are all working together as partners in buying properties and then using Greening Australia's equipment to replant native vegetation to restore connectivity.

What has happened in New South Wales, to move very quickly, is that recently I briefed the parks heads of agencies about this concept and then the minister took the idea to the Environment Protection and Heritage Council meeting which was held in New Zealand last year. The Environment Protection and Heritage Council has the ministers from the ACT, New South Wales, Victoria, the commonwealth, Queensland and so on on it and they strongly supported further development of the concept in partnership to do that.

It was announced in the *Sydney Morning Herald* of 24 February in a front page article—our minister, Bob Debus, made the announcement—that \$7 million had been allocated from the environment trust over three years to implement the concept in New South Wales. The ACT will be an important partner and player that we will be wanting to engage with and talk to because it is in a keystone location in the corridor. The sum of \$1 million will be allocated in the first year and there will be more money in subsequent years.

This is just a quick picture of the structure that is currently likely to go into place. We have the Environment Protection and Heritage Council, which the ministers sit on. It has established an agencies working group on which the ACT is represented—I will be the New South Wales representative—to provide advice back to the EPHC about how we might progress this concept further between the states. There is the beginning of a dialogue, really, so this inquiry is very timely and we thank you for the opportunity to present to it.

The New South Wales environment trust has this structure, with our Minister for the Environment as the chair. They allocated the \$7 million and they have instructed that we establish a subcommittee of about 10 or 11 members—community groups, scientists and key agencies—to provide governance and oversighting of the expenditure of that money. I am involved in the department in setting up a small unit that will help to run this project. These are the sorts of partners that we see as being involved: agencies, catchment management authorities, Greening Australia, bush heritage funds and so on. Land-holders, most critically, are a big focus of this. A scientific reference group and an Aboriginal reference group are critical extra bodies that we have established.

The next step is to establish a business plan that provides an investment strategy that

rolls that money out into a community branding and awareness strategy and into investments and incentives on the ground and to some extent to science to leverage other resources. We are going to use a mix of incentives and policy mechanisms to achieve a long-term program. It is really the beginning of a 20-year-plus program, and at this stage we have got three years to get it established and, I suppose, then to evaluate its value and whether it is accepted by the community.

Reserve establishment is still an important ongoing program, but it is not funded out of this money. The money will be used for things like voluntary conservation agreements, stewardship payments, incentive schemes of various types. We hope to also use other tools, like money from carbon credits; the other mechanisms used by other organisations, like CMAs through property vegetation plans; the focusing of biobanking, which is a new piece of legislation in New South Wales that allows developers to offset their developments; and so on.

These are some of the key focus areas of fragmentation where we might focus some of our investment. There is this corridor out to the west and the western slopes which is the greatest elevation or link out of the western slopes up to the summit of Kosciuszko, and from Kosciuszko to the coast is the second one. I will focus on this again in a minute. There are very big issues to be managed in the upper Hunter, and there are the broader ranges because there is a chance to collaborate with the central eastern rainforests world heritage area and the Queensland government.

This is Scottsdale, a property near the ACT border, near Mount Clear in the Namadgi national park, just recently purchased by the bush heritage fund. It is a natural temperate grassland that is extremely endangered. It is a key stepping stone into building a link to this corridor, so already we have partners in New South Wales, private NGOs and private philanthropic organisations that are willing to invest in building this concept.

That property, by the way, was launched only two weeks ago and there was a lot of media and press associated with that. The commonwealth minister helped fund the purchase of it through the national reserve system. I have forgotten the percentage of the contribution, but they allocated a proportion of the money, as well as money from the Vincent Fairfax foundation and a couple of private bequests. That is an example that, once you provide a vision and a concept in the landscape and the community gets it and think it is worth while, they are really willing to put an incredible amount of resources into it.

This is just showing Kosciuszko to the coast. We are zooming in on the ACT and the corridor here of connectivity between the Namadgi national park, the Tinderry nature reserve and the Tallaganda national park through here. There is actually a lot of native vegetation through here, but it is on private land and on special leases. The Scottsdale property is just at the tip of the arrow, just near Bredbo, just near Gungoandra Gap. Land management policies in the ACT that are recognising this and helping us to understand the ecological benefits of the movement of species through this area and its proximity generally to Canberra are all a part of the things that we would like to think about in terms of the biosphere reserve.

That is a list of the partners that are currently involved. It is led by the bush heritage

fund. They are very familiar names to you. Some of them are ACT organisations. This is just an example of how targeted use of key mechanisms like voluntary conservation agreements can be used to achieve landscape connectivity, and the same sorts of ideas could be pursued in the ACT in a biosphere reserve to create linkages between key pieces of native vegetation. We have used in this case targeted voluntary conservation agreements in New South Wales.

In the area here, the black blobs are actually private properties that have signed voluntary conservation agreements. These are agreements in perpetuity that provide for conservation management under the provisions of the National Parks and Wildlife Act in New South Wales, and people manage those lands as private sanctuaries or reserves. There are others of these agreements all around here. Over 80 were negotiated over a 2½-year period, with an allocation of about \$700,000 to support the development of those agreements.

I am coming to the end so that Graeme will have at least half an hour.

How could an ACT biosphere reserve contribute to A to A? These are just some suggestions from off the top of the head, really, but they are things that we could probably talk about once Graeme has finished his presentation. It is about supporting the vision. The biosphere reserve is a really excellent concept in the ACT that would support the vision for A to A. It would be incredibly compatible. I think that the ACT, by being a partner in this, would be demonstrating significant leadership and, by participating in it, it would be a model that would be seen internationally and globally as an incredibly cooperative model that we would be able to use to encourage other nations to take similar actions.

At a national level the ACT government, through its minister, could be a key player through the EPHC and the agency working group and the staff. One of the things that it could do is identify the range of mechanisms that could support conservation connectivity in the ACT generally, but particularly for the biodiversity areas in the buffer areas that you might identify. Those include planning policies, the use of incentive payments and voluntary agreements.

Amendments to lease conditions voluntarily or through some sort of incentive payments are ways to start to involve people in a biosphere reserve concept. They work whether you are going to have a biosphere reserve or another conservation initiative. A lot of the principles of A to A are in common with the biosphere reserve, but there is a governance arrangement often in a biosphere reserve that is a little bit more formal than what we are going to be doing with Australian Alps to Atherton, and there is often legislation involved.

I have been involved extensively in developing advice on biosphere reserves and conservation planning for our minister in New South Wales and I would be happy, with Alistair, to contribute to this in the future. I suppose the other thing is that the ACT biosphere reserve would help to promote, communicate and build awareness about conservation connectivity and the broader landscape in which the ACT sits. Thank you for that.

THE CHAIR: Thank you very much, Mr Pulsford. We will now go to you,

Mr Worboys, for your presentation. I congratulate you on the publication of your new book.

**Mr Worboys**: Thank you. I guess Ian has covered a lot of the ground I was going to cover, so I won't repeat that. What I will do is give you a little bit of background about the IUCN and some of the work we are doing, and that will dovetail more with what Ian was saying.

Are you familiar with the IUCN? It is the International Union for the Conservation of Nature, the World Conservation Union. When you hear about the red book of threatened species globally, that is one of its commissions, the Species Survival Commission. I will just read this out, because it sets a context for the biosphere reserve that you are considering:

The union's mission is to influence, encourage and assist societies throughout the world to conserve the integrity and diversity of nature and to ensure that any use of natural resources is equitable and ecologically sustainable.

That is very similar to your biosphere reserve concept. So overall the IUCN is made up of about 1,000 organisations, and about 10,000 individual experts, all around the world. It sits in Gland, Switzerland, and it has a number of regional secretariat type locations all around the world. Beneath that there are six commissions. I am involved with one of them, which is the World Commission on Protected Areas. The Species Survival Commission and the conservation and ecosystem management commission all have their mandates within that bigger commission.

I have given you in my submission the vision of one of the six commissions, which is:

To promote the establishment and effective management of a world-wide representative network of terrestrial and marine protected areas, as an integral contribution to the IUCN mission.

That work is being conducted around the world. IUCN's request of me as vice chair, mountains biome, is to focus on the mountains biome all around the world. More than 20 per cent of the earth's land system is in mountains. I call these mountains; they are just older and wiser than many of these young upstarts in the alps and so on, but basically the mountainous environments are one of the few places where there is still unfragmented, natural interconnection of natural lands for long distances—the Andes, Himalayas, the great escarpment of eastern Australia, which is what Ian has just described, and so on.

This is one of the few chances left on the planet to keep these large, unfragmented landscapes intact. So IUCN has agreed to a strategic plan worldwide to promote this in a context of populations increasing from six billion worldwide to about 9.2 billion in 2050, about eight billion in 2030, or something like that—not very far away—huge numbers of increase, with real pressures on water, real pressures on being able to survive in terms of humans on the earth.

A response to this is to encourage connectivity conservation along these large mountain chains to happen. That basically is being championed in many places. What we did in November 2006 was bring together people who were at the forefront of

managing these large continental scale connectivity conservation areas into an expert workshop—not to hear what they have to say but to contribute to a management book, which will come out in 2008. Ian was one of the people there.

Basically, the message was: how do you manage these things; how do you manage lands? They are the connectivity between protected areas, but without them most scientists are saying the existing protected areas will die as islands. If you isolate them by clearing the bush, even if they are large areas, you create islands and then many, many species will become extinct. The only way in which species have a chance on the planet, in the big picture of things, is to keep these large, unfragmented landscapes intact. That is why IUCN has given so much time and attention to promoting and pursuing this.

That gives a little bit of context for why I am here. It is in this context that I want to reassure the ACT government that it really has a great opportunity. If you look at my submission on the second page and in the context of the IUCN's mission and the vision of my particular commission, the commission on protected areas, the biosphere reserve is absolutely spot-on and a really smart way to go.

That support is based on local, regional, national and international conservation benefits, and really I want to talk about that. I am a local resident so I can wear a second hat here. It is a better place to live. It really is a smart investment. We are basically saying that if you go down the path of a biosphere reserve you are on about a healthy environment, and healthy people as a consequence of that. It is about sustainability. It is about keeping your biodiversity intact because, whether we like it or not, things will change. Climate change is a reality. Biomes will move. Vegetation will be different in the future from what is present now.

Biodiversity conservation is really critical. Any conservation biodiversity action will help futures, even though those futures may change to some degree. It means your catchments are kept intact. It means the air you breathe is still breathable, and that is what you are handing on to the next generation. So sustainable use and wise investment in research again all mean a better place for the ACT to be operating in. If you capture the imagination of the ACT people as part of that, if they are thinking about their grandkids, they will be looking for something that is going to be better for their grandkids—I believe, anyway. So locally a biosphere reserve is a wise investment.

Regionally, you have just heard Alistair speak about Kosciuszko national park. You have heard about extensions into New South Wales that they are looking at now, but equally the extension, the interconnection—however you like to call it; they can be two separate reserves or whatever, but for me thinking about the two areas of land as a biosphere reserve or reserves—again is a smart thing to do. What the ACT would bring would be the wisdom of dealing with leasehold lands—your buffer zones and your transition loans; all of the investments that you would make in improving those. Biodiversity conservation and biosphere reserve management concepts will lift the game. So the ACT has something it can offer with its research institutions sitting within it to help develop that.

So at a landscape level the ACT can play a role, in a very proactive and collaborative

way, in what is happening. At a national level—Ian has covered that very well—I see that the ACT can really have a series of demonstration projects about how this bigger A to A can work. It can easily be a model. It really sits in the context of a grand concept for Australia.

We have had 200 years of landscape clearing—with taxation benefits for doing it—and now we are suddenly realising, "Hey, hang on a minute. These lands are too important for water catchments; they are too important for our future." We are going to need the stability of our natural lands as much as possible, the resilience of those natural lands with the changes that are going to come on board with climate change. If we have disturbed lands we will have all sorts of other problems—Ian talked about weeds and other issues. So at a national level the ACT—a small chunk in that 2,800 kilometres—could easily set a context, set a degree of excellence of its management of a biosphere reserve, which would benefit all the connectivity conservation work on A to A.

At an international level there are very few models. There is a desire. There is a very clear knowledge that, if we do not move quickly on the planet, by 2015 or that sort of time frame the population growth is going to overcome the chances to keep these lands intact. If we don't have those ecosystem services working well, that is going to make great problems for the forecast populations of 2050. So there is a degree of urgency.

The great, if you like, continental scale connectivity conservation opportunities are few. Australia has one of them. The ACT could easily provide a leadership role in how to do it. It could influence A to A at 2,800 kilometres. Yellowstone to Yukon is one model. I brought that book in; it is a glossy book. But there are other models that people are looking for inspiration from—in Bhutan, in Nepal. There is a lot of effort going on in parts of the Andes. People are looking for inspiration, though.

At the workshop that we held there were 40 experts, which we headhunted from all over the world, to put together a guide about how to make this work, because we have only got a short period of time, till 2015, 2020, when patterns on the earth will be forever made in terms of retaining natural landscapes. We are talking about elephants in Africa. We are talking about rhinos in Nepal. We are talking about tigers in Nepal. We are talking about the grizzly bear in North America with Y to Y. These are the big species that really mark huge tracts of country. South America has got the condor, which needs huge tracts of country that are natural, but people also need water supplies and catchments.

I was in Ecuador in November, and the ice caps on the volcanoes higher than 6,000 metres are melting. That is the summer water supply for the locals. Once it has gone, it has gone. Global warming is causing it. Kilimanjaro in Africa is another one. Mount Kenya in Africa is another one. They are really worried about what they do once the ice caps have gone forever and melted, because it will be too hot.

I won't go into the Arctic and Antarctic, but change is happening. Connectivity conservation is a response to that change. It is happening internationally. It is happening in Australia, thank goodness, to a whole bunch of people Australia-wide, and the ACT can have a role which is pivotal, believe you me, by a demonstration of

what can be done on a landscape that is very special in its own right now. Thank you.

**THE CHAIR**: Thank you very much, Mr Worboys. We will now go to questions. Mr Pulsford, you talked about Yellowstone to Yukon and I wondered if you could expand on some of the partnerships and grassroots programs that have been happening over there.

Mr Pulsford: Yellowstone to Yukon is an interesting one. It is driven by non-government organisations. It is significantly funded by philanthropic funds like the Wilburforce Foundation that have allocated significant amounts of money to help community organisations invest in the idea. Quite a lot of it has gone into research, into investment in science, but also in community awareness and branding and marketing, so development of a website, community workshops, an array of publications, holding conferences and meetings, bringing people together like the indigenous tribes in that area or meetings even with other community groups and, I think potentially, with industry.

Graeme, are you willing to comment about some of the things they have done on the ground in terms of investments—purchasing land in some cases?

**Mr Worboys**: Yes, but it is also well written up—the deficiency of my memory versus what is written up—so I encourage you to look there, but—

**Mr Pulsford**: There is a tremendous amount in these books and on the website.

Mr Worboys: However, there have been some really great partnerships established, partnerships between Y to Y, which is a consortium now, a NGO entity. There has been a consortium with the coal industry for example. The coal industry own quite a lot of land in the Y to Y precinct. Coincidentally, these lands are grizzly bear crossings of highways. The mines are only interested in a certain layer of the coal measures, the bottom land is needed for the greater, I guess, operation of the mine, and the agreements have been taking place between private enterprise NGOs about retaining the interconnections and so on. There is also a link with the scientists, so there is another partnership with scientific research, because they are tracking how grizzly bears and other major species—keystone species if you are familiar with that type of work—basically are operating. If you look after the big species, a lot of the other species will be okay.

Mr Pulsford: Another example to complement that is working with governments, influencing policy, so the kind of planning decisions that are made by local government, by the state government and the federal government. There are particular big agencies like the national parks service, as it is called over there; it is different in each country. The arrangements obviously in Canada are a bit different from those in the northern United States, but its most significant impact is community awareness about the importance of large scale habitat connectivity, trying to get people to make all the decisions and all their actions consistent with achieving the vision—not fighting against it and gradually breaking the landscape down.

We want every organisation, whether it is a private business, a private land-holder or a government instrumentality, to think about how it acts in that landscape to further that vision. That is what we are trying to capture for A to A. We are trying to capture that thinking so that we are all partnering to work towards a common goal and set of principles.

What is different about this in Australia compared to North America is that it is an NGO-driven initiative in North America. This is the first time anywhere in the world a government has taken leadership like this, and do it in partnership with community groups, and that is a really significant advantage.

The Australian model is different; we don't have a history of very large-scale philanthropy for the environment like in North America, but this is a mechanism that with the ACT's interest in it could become very significant in terms of a global model for other countries to look at.

**Mr Worboys**: Another small building block is that because of the geography of Y to Y, and the same with A to A—it is just immense—the way in which the Y to A organisation has worked is that it is a whole series of smaller groups working within the bigger envelope, bigger umbrella. It is a very clever way to go.

**THE CHAIR**: The committee saw that in operation down at the Western Port biosphere reserve on the Mornington Peninsula.

**Mr Pulsford**: Yes; it is the same style of thing.

**THE CHAIR**: We saw there also these groups working with big industry—there was BlueScope Steel down there and the Esso bulk fuel supply—and they are looking at extending the size of the port as well; all these people were working together. You mentioned earlier on Snowy hydro and the ski resorts being a big part of the area—what sort of interactions and how can that business help in this program?

Mr Henchman: I will talk about that. There are a number of programs. There is awareness raising: places that get a lot of visitors, like ski resorts, are great venues, if you like, to get the sustainability message out to people. The ski resorts have been focusing on climate change and the implications for them of climate change, so encouraging people to behave in a more responsible way when they are at home so that they can still come skiing—those sorts of things—getting those general sustainability messages out; getting more specific messages into the broader community about the particular values of the Australian Alps and that local area but also in terms of getting the actual operators within the resorts to run their businesses in a much more sustainable way.

This environmental management system that I mentioned earlier is really about drilling down into every aspect of their business and making sure that they are doing each part of their business in the most environmentally sensitive and aware kind of way that can generate models for other businesses to follow. Snowy hydro is doing the same thing. When you drill down into the detail of their business, every decision they make, every new development that they do, every maintenance process that they do, goes through a process of considering the potential environmental impacts, how they deal with them and those sorts of things; so taking advantage of the context, being a national park, where the community are very sensitive to environmental

impacts, and getting those businesses to operate in a model way that can be a benchmark for others to follow.

**THE CHAIR**: You mentioned, of course, that you are in the announcement phase now. What is your next step from here?

**Mr Henchman**: In terms of A to A?

THE CHAIR: Yes.

Mr Pulsford: The next steps are establishing that working group between agencies whose ministers are represented on the EPHC. That will be in the next couple of months. Within New South Wales we are writing a business plan, and that is to be, hopefully, approved by our minister and by the environment trust in New South Wales by late May, hopefully June, so that the money can start being spent. The business plan is incredibly important because it will define the kinds of activities, where the investments might happen on the ground and the proportions of allocations for things like communication, awareness raising, and the types of incentives and money that might be allocated to it.

We are just writing the business plan at the moment. Once that is all approved, there will be ongoing liaison with the working group at the national level, but also a tremendous communication program working with catchment management authorities, local government, key conservation groups and so on, and industry, to carry out projects on the ground in those key areas that I mentioned.

**THE CHAIR**: It sounds quite exciting.

**MR SESELJA**: Alistair, you commented about getting organisations, ski resorts and the like in all of their practices to incorporate environmental best practice. How much of that is driven by the fact that it is a national park and how much is a result of the biosphere? I am just trying to get a picture, especially in your situation where you have got a national park that is also a biosphere, of how much the biosphere adds to what would ordinarily be done because it is a national park.

**Mr Henchman**: The key thing that the biosphere reservation does is give that international recognition to the significance of the park. It was the intention at that time in the seventies to do that. What that means is that it just increases our ability to, I suppose, assert the need to look after those values.

In terms of the initiatives being driven by the regulator, that is only partially true. The resorts have realised that just meeting their regulatory requirements is not really credible in terms of being a benchmark of sustainability. The resort operators group throughout Australia, for example, run a sustainability forum. There is one coming up in Melbourne towards the end of this month, the Alpine Resorts Sustainability Forum, where they educate each other about initiatives worldwide to run ski resorts better. Typically there is a speaker from North America or Europe or somewhere who comes along and talks about some of the initiatives that are happening there, so they see that there is a business advantage in projecting that green image, and certainly operating in a national park reinforces that. We do regulate them, but they are starting to step

ahead of that regulation and run their own initiatives, seeing the benefits.

**MR SESELJA**: On the issue of the ACT's contribution to the corridor from Kosciuszko to the coast, we obviously are a reasonable part of that corridor, especially Namadgi at the bottom of the ACT.

**Mr Pulsford**: Yes, that is right.

**MR SESELJA**: What do you think we could be doing differently in addition to what is done now that would contribute to the viability of that corridor?

**Mr Pulsford**: One of the important things is simply to be aware of it and for it to be identified in the plan of management as a habitat link, to help us with identifying with science, identifying species and ecosystems that are of benefit and would adapt in that area—the movement of animals. Communication between the scientists would be important.

Along the Murrumbidgee corridor there are great opportunities, both in the ACT and New South Wales, to strengthen the protection of the river valley itself and it would be excellent in the ACT. We hope to have a program of targeted use of voluntary conservation mechanisms. If something like that happened in the ACT as well we would be collectively really working together to retain the conservation values of the Murrumbidgee corridor as it passes through the ACT and back into New South Wales, and that would be incredibly worth while. Some of that land in the ACT has obviously been cleared for agriculture but it is developing an approach that might help to ameliorate the impacts of current activities and perhaps revegetate some areas. Those are the sorts of investments that you might like to look into.

There is also connectivity in the landscape around Queanbeyan—a cross-border type thing. We would have to look in detail. We are starting to zoom in to the detailed bits of the landscape here. But broadly it is being aware, in all the conservation policies in the ACT, of how they link into landscapes that surround them. That is just a logical sort of—

**Mr Henchman**: Can I just add a couple of points there? One is that Ian mentioned before that the mapping does not include grasslands and woodlands, so obviously to the north of the ACT there is lots of potential to connect with those sorts of ecosystems.

**Mr Pulsford**: Yes, absolutely.

Mr Henchman: The other point is that already in relation to Namadgi through the Australian Alps Liaison Committee there is a lot of working together between New South Wales and the ACT, and indeed Victoria, about coordinating the management of Namadgi with Brindabella and Kosciuszko, so there is a lot of discussion at a strategic level but also on a day-to-day level between park managers already, which can be reinforced in a more perhaps comprehensive way through a sort of cooperative arrangement like a biosphere reservation.

MS PORTER: My question is to any of you that want to answer it, but I think it was

you, Mr Worboys, that mentioned capturing the imagination of the community. When we were down at the Mornington Peninsula we heard from some people that even down there, where it has been going for quite a while, some of the groups still have a different impression of what it is. Some of the conservation groups, for instance, believe it is locking up everything forever and not touching anything—I think that was the phrase that was used by one of the people we discussed that with down there. So I guess capturing the ACT is a broad statement because the ACT community, obviously, are not a homogenous group of people either; they include the conservation groups, business and ACT public servants, for instance. So how do you capture a community's imagination if you cannot necessarily get everyone to understand what you are talking about?

Someone talked about demonstration projects. What kind of demonstration projects would you suggest might be useful for us to use? I am asking all my questions at once. The last thing I wanted to make some comments about was governance and networking, because we did understand from Mornington, in particular, that the governance and the networking were so critical to this whole process. If you have any clues for us about that—challenges et cetera, or ways forward—we would really like to hear them.

**Mr Worboys**: It is interesting that in our workshop, where we had people from all around the world, in Ecuador just last November, that was one of those issues: how do you actually make this work? It is so huge this connectivity conservation. Let us bring it back to the ACT, which is a very large area of land anyway. It is the same sort of thinking. In some of the models that are working, people are asking how you do it. I think a lot of it is to do with inspired leadership—more than one person perhaps. The key is energy and inspired leadership by one or two people who can keep the model going.

Secondly, there are smart management aids that business use on a daily basis to attract attention to say, "Well, that's worth while" and get commitment, whether or not they are selling something. It is actually continually having that at the forefront. Y to Y again is a really good model of that—and perseverance, and dealing with the politicians, having lunches. You have done it if you are in business, or working just normally. It is basically perseverance. But leadership is the key thing. It is voluntary, so people need to come on board and they have got to feel good about it. They will say, "What's in it for me? Why should I bother?" I think there should be advantages as a consequence of biosphere reserves—maybe some of the up and coming new incentives like carbon sequestration and trading—all of those types of initiatives. Governments should set a framework where these things can answer the question: what's in it for me? Secondly, hopefully, people care about their grandkids; that is where I come from particularly strongly. So that is number one.

**Mr Pulsford**: I think branding and awareness, to clarify the images and to create clear notions about what this is about and how people can participate is a really, really important part of that leadership. That involves marketing campaigns and it requires a bunch of skills from people in the business community even who are involved in that kind of thing, to help provide advice and to develop those key messages. It is also having programs that people can do in their local area. So it has got to be local, not too big; it has got to actually relate to the level of my property and what I am doing. It

is terribly important to get those messages across so that people get a very clear understanding of what the biosphere reserve is and is not. That is a communication story. It requires leadership, but it needs good communicators to do that.

Mr Worboys: The second part was demonstration projects. I think that getting maximum publicity for all the advantages of a demonstration project is spot-on. I believe that the ACT has a whole spectrum of choices already that you could build on. You have Namadgi with its core area; you have the Murrumbidgee corridor and the leasehold lands—there are a number of initiatives I am aware of that you have got with that—right through to your sustainable use issues with the waste depots, how you are dealing with waste and the incentives associated with green energy. It is one that you believe can really capture the imagination of the local population, but I really agree with you that demonstration projects are very wise. There are many people out there who would love to work with you in a coordinated way—Greening Australia, Landcare and all of the initiatives—teaming up with New South Wales, teaming up with two biosphere reserves. There could be a number running concurrently. That is not giving you the exact answer to what it should be but—

Mr Henchman: I am not sure what mechanisms you have in the ACT for in-perpetuity conservation on private lands, but we have mechanisms in New South Wales, so we can actually get people to sign up. There is a covenant on the title of the land, which means that it has to be managed for conservation according to a management plan. Those initiatives can create linkages between other protected areas on a more local scale. I think Ian showed us some of those earlier. That is potentially a tangible project that the ACT could do and create those corridors on a local level. Then there are education programs, particularly school-based programs and programs that target people with a low level of awareness of sustainability and environmental issues. There is huge potential in the ACT to carry out those sorts of projects. Those are just a couple of ideas.

**THE CHAIR**: What are some of the incentives that you give to these rural landholders at the moment?

Mr Henchman: They get rating exemptions for that part of their land that is subject to the voluntary conservation agreement. There are advantages in terms of stamp duties and some of the other land related taxes, so that is quite an incentive. Then we provide ongoing support and advice in terms of preparing their management plan, but then also in terms of dealing with issues as we go along. That becomes a cost to government in terms of managing a private protected area system and supporting the management of the private protected area system. But it is a lot cheaper than managing a public protected area system, so there is a cost implication in that which needs to be considered.

**Mr Pulsford**: There is money provided to them for putting in fencing, weed control, and developing a management plan. For example, from time to time if there is additional money at a later date they can sometimes get allocations through that program. But they become part of a partnership program with the department. They become part of a conservation club, in effect. They get newsletters, they get involved in field days, all these kinds of things, so they are not left entirely on their own; they form part of a community of shared interests.

**Mr Henchman**: And get the benefits of voluntary conservation groups who are doing conservation works on their lands and things like that.

In terms of governance arrangements there are a number of examples. We have spoken about some, but close to home is the Australian Alps Liaison Committee, more or less a voluntary agreement between several jurisdictions to coordinate their management of those protected areas in the alps. There are any number of potential governance arrangements that do not impact on the statutory powers of the partners. So there are a lot of options there.

**Mr Pulsford**: I gave a presentation to the Australian Alps Liaison Committee only very recently—last week or the week before—so they are familiar with this and are continuing to consider how they can be involved.

**THE CHAIR**: We have gone a little bit over time. Thank you very much for your presentations and submissions to the committee. If there are any further questions we have for you we will follow those up, and we will get a copy of the transcript of the hearing to you, as soon as we can.

The committee adjourned at 3.10 pm.